IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No. 9870
Dale B. Schenk	Examiner: Anne Marie Sabrina Wehbe
Application No.: 09/723,713	Technology Center/Art Unit: 1632
Filed: November 27, 2000	Declaration of Dr. J. Steven Jacobsen under 37 CFR 1.132
For: PREVENTION AND TREATMENT OF AMYLOIDOGENIC DISEASE	
Customer No.: 20350	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, J. Steven Jacobsen, state as follows.

(1) My current position is Associate Director, Neuroscience, Wyeth Research, Princeton, NJ 08543. I understand Wyeth is a licensee of the above-captioned application. A copy of my curriculum vitae is attached.

(2) I am familiar with the publication Bard et al., Proc. Natl. Acad. Sci. USA 100, 2023-2028 (2003), which reports that the 10D5 antibody, despite significantly lowering levels of Aβ in the brain of a transgenic mouse model of Alzheimer's disease, did not significantly reduce neuritic dystrophy.

(3) I understand that the Examiner of the above-captioned application interprets the above result as evidence that the 10D5 antibody would not be useful in treating Alzheimer's disease.

(4) I and/or others acting under my supervision have performed experiments to test the 10D5 antibody for affects on cognition in a transgenic mouse model of Alzheimer's disease. In brief, the experiments show that the 10D5 antibody does have a statistically significant beneficial effect on cognition notwithstanding the lack of such an effect on neuritic dystrophy reported in Bard et al..

(5) The details of the experiments are as follows.

METHODS & MATERIALS

Animals:

Transgenic (Tg2576) mice were heterozygous for the K670N/M671L amyloid precursor protein transgene. All transgenic genotypes were confirmed by PCR and all animals homozygous for the Retinal Degeneration (Rd) mutation were excluded. The background strain consisted of a C57Bl6 and 129SJL cross.

Transgenic mice exhibited cognitive deficits in contextual memory beginning at 14-16 weeks of age. Cognitive deficits were particularly prominent at 20 weeks of age and were maintained up to 65 weeks of age.

Testing Apparatus

Approximately 20 week old male transgenic mice and wild-type littermate control mice were individually housed for at least 2 weeks prior to any testing and allowed *ad libitum* access to food and water. CFC occurred in six 30 x 24 x 21cm operant chambers (Med Associates, Inc) constructed from aluminum sidewalls and plexiglass ceiling, door and rear wall. Each chamber was equipped with a floor consisting of 36 stainless steel rods through which a foot shock could be administered. In addition, each chamber had 2 stimulus lights, one house light and a solenoid. Lighting, the footshock (US) and the solenoid (CS) were all controlled by a PC running MED-PC software. The chambers were located in a sound isolated room in the presence of red light.

Contextual Fear Conditioning (CFC) Assay

Mice (n=8-12/genotype/treatment) were trained and tested on two consecutive days. The Training Phase consisted of placing the mice in the operant chambers, illuminating both the stimulus and houselights and allowing them to explore for 2 minutes. At the end of the two minutes, the auditory cue (2Hz clicking via the solenoid; CS) was presented for 15 seconds. The footshock (US; 1.5 mAmp) was administered for the final 2 seconds of the CS and co-terminated with the CS presentation. This procedure was repeated and 30 seconds after the second foot shock the mice were removed from the chambers and returned to their home cages.

Twenty hours after training, animals were returned to the chambers in which they had previously been trained. Freezing behavior, in the same environment in which they had received the shock ("Context"), was then recorded by the experimenter using time sampling in 10 seconds bins for 5 minutes (30 sample points). Freezing was defined as the lack of movement except that required for respiration. At the end of the 5 minute Context test mice were returned to their homecages. Freezing in the Novel and Cue condition was collected after all of the mice had been tested in Context (~60 minutes after the initial Context test). The novel environment consisted of modifications of the operant chamber including an opaque plexiglass divider from the rear right corner to the front left, a plexiglass floor as well as decreased illumination (houselight only). Mice were placed in the Novel context and time sampling was used to collect freezing scores for 3 minutes (18 sample points). At the end of the 3 minutes, the auditory clicker (CS) was presented for 3 minutes during which freezing was again scored (18 sample points). Freezing scores for each animal were converted to percent freezing for each portion of the test. Memory for the context (Contextual memory) for each animal was obtained by subtracting freezing score in the novel condition (a measure of basal activity) from that observed in the context.

Treatment Regime

Wild-type and Tg2576 mice were administered a single dose of phosphate buffered saline (PBS) or treatment antibody by intraperitoneal injection at 24 hours prior to the training phase of the CFC.

RESULTS

Therapeutic efficacy is expressed both in terms of memory deficit reversal and memory impairment status. "Memory deficit reversal" was determined by comparing the freezing behavior of mAb- vs. PBS control-treated Tg2576 animals. "Memory impairment status" was determined by comparing the freezing behavior of wild-type vs. Tg2576 mAb-treated animals. The results indicated that the mAb 10D5 (at 30 mg/kg) caused a significant improvement in contextual memory of Tg2576 mice relative to a control treatment (p value <0.05), and no significant memory impairment with respect to wild-type mice (p value > 0.05).

Memory Deficit Reversal per Ab dosage (mg/kg) (p value WRT PBS Control)					**Impairment Status per Ab dosage (mg/kg)** (p value WRT WT mice)				
0.3	**1**	**3**	**10**	**30**	**0.3**	**1**	**3**	**10**	**30**
		0.7045	0.9661	0.0189			0.0009	0.002	0.0752

(6) I interpret these data as showing that an antibody to Aβ can exert a beneficial effect on cognition and thus be useful in treating Alzheimer's disease.

(7) I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

J. Steven Jacobsen, Ph.D.

Date 10/19/05

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History:

Wyeth Research	**07/1995 - Present**
Princeton, NJ, USA	
Associate Director, Neurodegeneration Research	**08/2001 - Present**
Team Leader, Alzheimer's Disease Amyloid Programs	**07/1995 - Present**
Lederle Laboratories, American Cyanamid	**05/1988 - 06/1995**
Pearl River, NY, USA	
Team Leader, Alzheimer's Disease Program	**07/1992 - 06/1995**
Senior Scientist II, Alzheimer's Disease Program	**01/1991 - 06/1992**
Senior Scientist I, Alzheimer's Disease Program	**12/1989 - 12/1990**
Postdoctoral Scientist, Alzheimer's Disease Program	**05/1988 - 11/1989**

1995-Pres. Wyeth Neuroscience, Wyeth, Princeton, NJ.
Research Interests: Disease-modifying strategies for the treatment of patients with Alzheimer's Disease.

1988-1995 Central Nervous System Biological Research Department, Medical Research Division, Lederle Laboratories, American Cyanamid Co., Pearl River, NY.
Research Interests: Molecular mechanisms of Alzheimer's Disease: Expression and processing of Amyloid Precursor Proteins.
1988-1989 Postdoctoral Scientist (Molecular Neurobiologist & Biochemist)
1989-1995 Senior Research Scientist II (Molecular Neurobiologist)

1979-1983 Department of Dermatology, New York University School of Medicine, NYU Medical Center, NY, NY.
Research Interests: Identification & purification of human melanoma-associated cell-surface proteins and the development of a vaccine for immunotherapy.
1979-1980 Research Technician I
1980-1981 Research Technician II
1981-1982 Senior Research Technician

Education:

Graduate, Ph.D. in molecular genetics, Dr. M. Zafri Humayun, Dept. of Microbiology and Molecular Genetics, Graduate School of Biomedical Sciences, University of Medicine and Dentistry-New Jersey Medical School, Newark, NJ, 1983 - 1988.

Graduate, M.S. in biochemistry, Dr. John R. Keller, Department of Biology, Seton Hall University, South Orange, NJ, 1977 - 1979.

Undergraduate, B.S. in biology, Department of Biology, Seton Hall University, South Orange, NJ, 1974 - 1977.

Invited Lectures:

1989 **"Molecular Mechanisms of Amyloid Peptide Precursor in Alzheimer's Disease."** New Jersey Neuropsychopharmacology Society Annual Symposium, Princeton University, Princeton, NJ.

1989 **"Alzheimer's Disease and the Molecular Mechanisms of Amyloid Peptide Precursor Expression."** Graduate Biology Seminar Series, Department of Biology, Seton Hall University, South Orange, NJ.

1990 **"Expression of Amyloid Peptide Precursor Expression and deposition of β-amyloid peptide in Alzheimer's Disease."** Department of Biology, William Paterson College, Wayne, NJ.

1992 **"Processing of β-amyloid peptide in Alzheimer's Disease."** Department of Biology, William Paterson College, Wayne, NJ.

1993 **"Molecular Mechanisms of Alzheimer's Disease: Therapeutic approaches to reduce the formation of β-amyloid peptide."** Graduate Biology Seminar Series, Department of Biology, Seton Hall University, South Orange, NJ.

1994 **"Alzheimer's Disease and β–amyloid peptide: Molecular Mechanisms to Block the Formation of β–Amyloid Peptide."** Dept. of Molecular Biology and Molecular Genetics, University of Medicine and Dentistry-New Jersey Medical School, Newark, NJ.

1995 **"Alzheimer's Disease and β–amyloid peptide: Molecular Mechanisms to Drug Discovery."** Dept. of Environmental Medicine, NYU School of Medicine, Tuxedo, NY.

1995 **"Therapeutic Strategies to Reduce Formation of β–amyloid peptide in**

Alzheimer's Disease." Alzheimer's Disease: Latest Advances in Understanding and Treatment. Sponsored by IBC USA Conferences Inc., Waltham, Massachusetts.

1996 **"Therapeutic Strategies to Reduce Formation of β–amyloid peptide in Alzheimer's Disease."** Alzheimer's Disease: Advances in Diagnostics and Drug Development. Sponsored by IBC USA Conferences Inc., Oak Brook, Illinois.

1999 **"Advances in Understanding the Molecular Mechanisms of Alzheimer's Disease."** Depts. of Environmental Medicine and Biology, NYU School of Medicine, NY, NY.

2000 **"Alzheimer's Disease: Development of Protease Inhibitors as Aβ-Lowering Agents."** American Home Products Corporation, Senior Managers Symposium, Baltimore, MD.

2001 **"Alzheimer's Disease: Current and Emerging Therapeutic Strategies."** *Medicinal Chemistry*, Gordon Research Conferences, Colby-Sawyer College, New London, NH.

2001 **"Strategic Approaches for the Treatment of Alzheimer's Disease."** Lecture series in Medicinal Chemistry, Associated Colleges of the Chicago Area (ACCA), Morton Arboretum, Lisle, IL.

2004 **"Alzheimer's Disease And Emerging New Disease-Modifying Therapeutic Strategies."** The 2004 Robert S. Rozman Memorial Symposium, Delaware Valley Drug Metabolism Discussion Group, Langhorne, PA.

2005 **"Anti-Amyloid Approaches for the Treatment of Alzheimer's Disease."** 7TH International Neurodegeneration In Alzheimer's Disease, Parkinson's Disease and Related Disorders, Strategic Research Institute, Princeton, NJ. (April 2005)

2005 **"Alzheimer's Disease: The Next Generation of Symptomatic and Disease Modifying Therapies."** Bio2005, Philadelphia, PA. (June 2005)

2005 **"Disease-Modifying Therapeutic Approaches for the Treatment of Alzheimer's Disease."** Therapeutic Strategies Against Neurodegenerative Conditions, Boston, MA. (Oct. 2005)

Professional Membership, Review Committees and Appointments:

1991-present Society for Neuroscience
Chicago, Il

1993-present *AD HOC* Review Committee Member
Alzheimer's Disease Center Cores (ADCCs)
National Institute on Aging (NIA/NIH), Bethesda, Md.

1994-present External Peer Review Committee Member
UMDNJ and Allied Health Services Foundation
University of Medicine and Dentistry-New Jersey Medical School, New Brunswick, NJ.

1995-present Adjunct Associate Professor (Lecturer in Neurobiology and Neurotoxicology; Graduate Student Thesis Committee Member)
New York University School of Medicine, NYU Medical Center, NY, NY.

1997-present Review Board Committee Member,
Medical and Scientific Advisory Council,
Alzheimer's Association, Inc., Chicago, Il,

2003-Present *Current Alzheimer Research,* Editorial Board (Bentham Press)

Bibliography:

Publications:

1. Bystryn, J.-C., **Jacobsen, J.S.,** Liu, P. and Heaney-Kieras, J. (1982). Comparison of cell-surface human melanoma-associated antigens identified by rabbit and murine antibodies. *Hybridoma,* **1,** 465-472.

2. Refolo, L.M., Conley, M.P., Sambamurti, K., **Jacobsen, J.S.** and Humayun, M.Z. (1985). Sequence context effects in DNA replication blocks induced by aflatoxin B1. *Proceedings of the National Academy of Sciences, USA,* **82,** 3096-3100.

3. Bystryn, J.-C., **Jacobsen, J.S.,** Harris, M., Roses, D., Speyer, J. and Levin, M. (1986). Preparation and characterization of a polyvalent human melanoma antigen vaccine. *Journal of Biological Response Modification,* **5,** 211-224.

4. **Jacobsen, J.S.** and Humayun, M.Z. (1986). Chloroperbenzoic acid induced DNA damage and peracid activation of aflatoxin B1. *Carcinogenesis,* **3,** 491-493.

5. **Jacobsen, J.S.,** Refolo, L.M., Conley, M.P., Sambamurti, K., and Humayun, M.Z. (1987). DNA replication-blocking properties of adducts formed by aflatoxin B1-2,3-dichloride and aflatoxin B1-2,3-oxide. *Mutation Research,* **179,** 89-101.

6. Sambamurti, K., Callahan, J., Luo, X., Perkins, C.P., **Jacobsen, J.S.** and Humayun, M.Z. (1988). Mechanisms of mutagenesis by a bulky DNA lesion at the guanine-N7 position. *Genetics,* **120,** 863-873.

7. **Jacobsen, J.S.,** Perkins, C.P. Callahan, J.T., Sambamurti, K. and Humayun, M.Z. (1989). Mechanisms of mutagenesis by chloroacetaldehyde. *Genetics,* **121,** 213-222.

8. Goldgaber, D., Harris, H.W., Hla, T., Maciag, T., Donnelly, R.J., **Jacobsen, J.S.,** Vitek, M.P. and Gajdusek, D.C. (1989). Interleukin-1 regulates synthesis of amyloid β-protein precursor mRNA in human endothelial cells. *Proceedings of the National Academy of Sciences, USA,* **86,** 7606-7610.

9. **Jacobsen, J.S.** and Humayun, M.Z. (1990). Mechanisms of mutagenesis by the vinyl chloride metabolite chloroacetaldehyde. *Biochemistry,* **29,** 496-504.

10. **Jacobsen, J.S.,** Blume, A.J. and Vitek, M.P. (1991). Quantitative measurement of alternatively spliced amyloid precursor protein mRNA expression in Alzheimer's disease and normal brain by S_1 nuclease protection analysis. *Neurobiology of Aging,* **12,** 585-592.

11. **Jacobsen, J.S.,** Muenkel, H.A., Blume, A.J. and Vitek, M.P. (1991). A novel species

specific RNA related to alternatively spliced amyloid precursor protein mRNAs. *Neurobiology of Aging*, **12,** 575-583.

12. Sahasrabudhe, S.R., Spruyt, M.A., Muenkel, H.A., Blume, A.J., Vitek, M.P. and **Jacobsen, J.S.** (1992). Release of amino-terminal fragments from Amyloid Precursor Protein reporter and mutated derivatives in cultured cells. *Journal of Biological Chemistry*, **267,** 25602-25608.

13. Sahasrabudhe, S.R., Brown, A.M., Hulmes, J., **Jacobsen, J.S.,** Vitek, M.P., Blume, A.J., and Sonnenberg, J.L. (1993) Enzymatic generation of the amino-terminus of the β-amyloid peptide. *Journal of Biological Chemistry*, **268,** 16699-16705.

14. Brown, A.M., George, S., Blume, A.J., Dushin, R.G., **Jacobsen, J.S.** and Sonnenberg-Reines, J. (1994). Biotinylated and cysteine modified peptides as useful reagents for studying the inhibition of cathepsin G. *Analytical Biochemistry*, **217,** 139-147.

15. **Jacobsen, J.S.**, Spruyt, M.A., Brown, A.M., Sahasrabudhe, S.R., Blume, A.J., Vitek, M.P., Muenkel, H.A. and Sonnenberg-Reines, J. (1994). The release of Alzhiemer's disease β-amyloid peptide is reduced by phorbol treatment, *Journal of Biological Chemistry*, **269,** 8376-8382.

16. Brown, A.M., Tummolo, D.M., Spruyt, M.A., **Jacobsen, J.S.** and Sonnenberg-Reines, J.L. (1996). Evaluation of Cathepsins D, G, and E.C. 3.4.24.15 as candidate beta-secretase proteases using peptide and amyloid precursor protein substrates. *Journal of Neurochemistry*, **66,** 2436-2445.

17. Alpin, A.E., Gibb, G.M., **Jacobsen, J.S.,** Gallo, J.-M. and Anderton, B.H. (1996) *In vitro* phosphorylation of the cytoplasmic domain of the amyloid precursor protein by tau proline-directed kinases. *Journal of Neurochemistry*, **67,** 699-707.

18. Alpin, A.E, **Jacobsen, J.S.,** Anderton, B.H. and Gallo, J.-M. (1997). Effect of increased Glycogen Synthase Kinase-3 activity upon the maturation of the Amyloid Precursor Protein in cultured cells. *NeuroReport*, **8,** 639-643.

19. Brown, A.M., Tummolo, D.M., Rhodes, K.J., Hoffman, J.J., **Jacobsen, J.S.,** and Sonnenberg-Reines, J.L. (1997). Selective aggregation of endogenous β-Amyloid Peptide and soluble Amyloid Precurosr Protein in cerebrospinal fluid by zinc. *Journal of Neurochemistry*, **69,** 1204-1212.

20. Johnsingh, A.A., Johnston, J.M., Merz, G., Xu, J., Kotula, L., **Jacobsen, J.S.,** and Tezapsidis, N. (2000). Altered Binding of Mutated Presenilin with Cytoskeleton-Interacting Proteins. *FEBS Letters*, **465,** 53-58.

21. Kajkowski, E.M., Lo, C.F., Ning, X., Walker, S., Sofia, H., Wang, W., Edris, W.,

Chandra, P., Wagner, E., Vile, S., Ryan, K., McHenry-Rinde, B., Smith, S.C., Wood, A., Rhodes, K.J., Kennedy, J., Bard, J., **Jacobsen, J. S.** and Ozenberger, B.A. (2001). β-Amyloid Peptide-Induced Apoptosis Regulated by a Novel Protein Containing a G Protein Activation Module. *Journal of Biological Chemistry,* **276,** 18748-18756.

22. **Jacobsen, J. S.** (2002). Alzheimer's Disease: An Overview of Current and Emerging Therapeutic Strategies. *Current Topics in Medicinal Chemistry,* **2,** 343-352.

23. Naureckiene, S., Ma, L., Sreekumar, K., Purandare, U., Frederick, C., Lo, C.F., Huang, Y., Chiang, L.W., Grenier, J.M., Ozenberger, B.A., **Jacobsen, J.S.,** Kennedy J.D., DiStefano, P.S., Wood, A., Bingham, B. (2003). Functional Characterization of Narc 1; A Novel Proteinase Related to Proteinase K. *Archives of Biochemistry and Biophysics,* **420,** 55-67.

24. Zhang, M.-Y., Kerns, E., McConnell, O., Sonnenberg-Reines, J., Zaleska, M.M., **Jacobsen, J.S.,** Butera, J. and Kreft, A. (2004). "Brain and plasma exposure profiling in early drug discovery using cassette administration and fast liquid chromatography-tandem mass spectrometry." *Journal of Pharmaceutical and Biomedical Analysis,* **34,** 359-368.

25. Liu, F., Lo, C.F., Ning, X.-P., Kajkowski, E.M., Jin, M., Chiriac, C., Gonzoles, C., Naureckiene, S., Lock, Y.-W., Pong, K., Zaleska, M.M., **Jacobsen, J.S.,** Silverman, S. and Ozenberger, B.A. (2004). Expression of NALP1 in Cerebellar Granule Neurons Stimulates Apoptosis. *Cellular Signalling,* **16,** 1013-1021.

26. Gundersen, E., Fan, K., Haas, K., Huryn, D., **Jacobsen, J.S.,** Kreft, A., Martone, R., Mayer, S., Sonnenberg-Reines, J., Sun, S.-C., Zhou, H. (2005). Molecular-Modeling Based Design, Synthesis, and Activity of Substituted Piperidines as γ-Secretase Inhibitors. *Bioorganic and Medicinal Chemistry Letters,* **15,** 1891-1894.

27. Pangalos, M.N., **Jacobsen, J.S.** and Reinhart, P.H. Disease Modifying Strategies for the Treatment of Alzheimer's Disease Targeted at Modulating Levels of the β-Amyloid Peptide. (2005). *Biochemical Society Transactions.* **33,** 553-558.

28. **Jacobsen, J.S.,** Reinhart, P.H. and Pangalos, M.N. (2005). Current Concepts in Therapeutic Strategies Targeting Cognitive Decline and Disease Modification in Alzheimer's Disease. *NeuroRx.* **2,** 612-626.

29. Comery, T.A., Martone, R.L., Aschmies, S., Atchison, K.P., Diamantidis, G., Gong, X., Zhou, H., Pangalos, M.N., Sonnenberg-Reines, J., Kreft, A.F., **Jacobsen, J.S.** and Marquis, K.L. (2005). Acute γ-Secretase Inhibition Improved Contextual Fear Conditioning in the Tg2576 Mouse Model of Alzheimer's Disease. *Journal of Neuroscience.* **25,** 8898-8902.

30. Lo, C.F., Ning, X., Jin, M., Kajkowski, E.M., Liu, F., Gonzoles, C., Zaleska, M.M., Wang, W., Betty-Blacher, M., Franco, R., Wood, A., **Jacobsen, J.S.,** Silverman, S. and Ozenberger, B.A. (2005). Induced Expression of Death Domain Genes NALP1 and NALP5 Following Neuronal Injury (Submitted, *Journal of Molecular Neuroscience*).

31. Bingham, B., Shen, R., Kotnis, S., Lo, C.F., Ozenberger, B.A., Ghosh, N., Kennedy, J.D., **Jacobsen, J.S.,** Grenier, J.M., DiStefano, P.S., Chiang, L.W. and Wood, A. (2005). Pro-apoptotic effects of NARC 1 (=PCSK9), the gene encoding a novel serine proteinase (Submittd for internal approval).

32. **Jacobsen, J.S.,** Wu, C.-C., Redwine, J.M., Comery, T.A., Arias, R., Bowlby, M., Martone, R., Morrison, J.H., Reinhart, P.H., Pangalos, M.N. and Bloom, F.E. Early Behavioral and Synaptic Deficits Detected in a Mouse Model of Alzheimer's Disease (Manuscript in preparation).

Book Chapters:

1. Donnelly, R.J., **Jacobsen, J.S.,** Rasool, C.G., Bartus, R., Blume, A.J. and Vitek, M.P. (1989) Isolation and expression of multiple forms of beta amyloid protein precursor cDNA in Alzheimer's Disease. *In: Alzheimer's Disease and Related Disorders. Progress in Clinical and Biological Research, Volume 317.* K. Iqbal, H.M. Wisniewski and B. Winblad (editors), Alan R. Liss, Inc., New York. pp. 925-937.

Abstracts:

1. **Jacobsen, J.S.** and Keller, J.R. 1980. Proline production of *Agrobacterium rubi* strains as a major contributing factor in the growth enhancement of *Thielaviopsis basicola. Abstracts of the Annual Meeting, American Society for Microbiology,* Miami Beach, Florida, 11-16 May, 1980.

2. Refolo, L.M., Conley, M.P., Sambamurti, K., **Jacobsen, J.S.,** and Humayun, M.Z. 1985. Sequence context effects in DNA replication blocks induced by aflatoxin B1. *Abstracts of the 13th International Congress of Biochemistry,* Amsterdam, The Netherlands, 25-30 August, 1985.

3. Refolo, L.M., Conley, M.P., Sambamurti, K., **Jacobsen, J.S.,** and Humayun, M.Z. 1985. Sequence context effects in DNA replication blocks induced by aflatoxin B1. *Abstracts of the Mechanism of Mutagenesis: Impact on Carcinogenesis,* Mittelwihr, France, 22-27 September, 1985.

4. **Jacobsen, J.S.,** Refolo, L.M., Sambamurti, K. and Humayun, M.Z. 1986. Replication blocks induced by aflatoxin B1: DNA sequence and conformation specificity and

effect of manganese. UCLA Symposia on Molecular and Cellular Biology: Mechanisms of DNA Replication and Recombination, *Journal of Cellular Biochemistry, Supplement 10B*, Park City, Utah, 22 February-23 March, 1986.

5. **Jacobsen, J.S.** and Humayun, M.Z. 1986. Chloroacetaldehyde-induced DNA lesions block DNA replication and permit misincorporation at A and C residues. *Abstracts of the annual meeting of the Environmental Mutagen Society*, Washington, D.C., 21-23 April, 1986.

6. **Jacobsen, J.S.** and Humayun, M.Z. 1986. Effect of chloroacetaldehyde-induced lesions on DNA template activity. New Jersey State Commission on Cancer Research: *A Workshop on Cancer Research in New Jersey*, Woodbridge, New Jersey, 22 November, 1986.

7. Sambamurti, K., Callahan, J.T., Perkins, C.P., **Jacobsen, J.S.** and Humayun, M.Z. 1988. Activated aflatoxin induces transversions and transitions with equal efficiencies in phage M13. UCLA Symposia on Molecular and Cellular Biology: Mechanisms and Consequences of DNA Damage Processing. *Journal of Cellular Biochemistry, Supplement 12A*, Taos, New Mexico, 24-31 January, 1988.

8. Donnelly, R.J., **Jacobsen, J.S.,** Rasool, C.G., Bartus, R., Blume, A.J. and Vitek, M.P. 1988. Isolation and expression of multiple forms of beta amyloid protein precursor cDNA in Alzheimer's Disease. *Abstracts of Proceedings of the First International Conference on Alzheimer's Disease and Related Disorders.* Las Vegas, Nevada, September, 1988.

9. Vitek, M.P., **Jacobsen, J.S.,** Donnelly, R.J. and Blume, A.J. 1989. Quantitative and qualitative analysis of multiple APP RNA forms in normal and Alzheimer's Brains. UCLA Symposia on Molecular and Cellular Biology: Molecular Biology of Aging. *Journal of Cellular Biochemistry, Supplement 13C*, p. 166, Santa Fe, New Mexico, 4-10 March, 1989.

10. **Jacobsen, J.S.,** Donnelly, R.J., Blume, A.J. and Vitek, M.P. 1989. Quantitative and qualitative analysis of multiple APP RNA forms in normal and Alzheimer's Brains. *Abstracts of Molecular and Cellular Mechanisms of Neuronal Plasticity in Aging and Alzheimer's Disease,* p. 43. National Institute on Aging, The National Institutes of Health, Bethesda, Maryland, 1-3 May, 1989.

11. **Jacobsen, J.S.,** Donnelly, R.J., Beer, B., Blume, A.J. and Vitek, M.P. 1989. Quantitative and qualitative characterization of multiple APP RNA forms in normal and Alzheimer's brains by S1 protection analysis. *Society for Neuroscience Abstracts,* vol. 15, p. 647. Phoenix, Arizona, 29 October-3 November, 1989.

12. **Jacobsen, J.S.,** Blume, A.J. and Vitek, M.P. 1990. A major amyloid RNA in human

brain is species specific and may encode a novel soluble protein. UCLA Symposia on Molecular and Cellular Biology: Molecular Neurobiology. *Journal of Cellular Biochemistry, Supplement 14F*, p. 59, South Padre Island, Texas, 17-23 April, 1990.

13. **Jacobsen, J.S.,** Beer, B., Blume, A.J. and Vitek, M.P. 1990. A specific increase in APP-695 mRNA levels is correlated with amyloid plaque pathology in the cerebral cortex of Alzheimer's disease. *Society for Neuroscience Abstracts,* vol. 16, p. 345. St. Louis, Missouri, 28 October-2 November, 1990.

14. Vitek, M.P., **Jacobsen, J.S.,** Sonnenberg, J., Sahasrabudhe, S., Muenkel, H.A., Spruyt, M.A., and Blume, A.J. 1991. The APPREP System, Protein Processing and BAP Production: Characterization of APP-Reporter Protein. *Society for Neuroscience Abstracts,* vol. 17, p. 1443. New Orleans, Louisiana, 10-15 November, 1991.

15. Sonnenberg, J.L., Sahasrabudhe, S.R., Hulmes, **Jacobsen, J.S.,** Blume, A.J. and Vitek, M.P. 1992. N-terminal cleavage of ß-amyloid by Cathepsin G is dependent on pH and ionic conditions. *Society for Neuroscience Abstracts,* vol. 18, p. 1441. Anaheim, California, 25-30 October, 1992.

16. Sahasrabudhe, S.R., Spruyt, M.A., Muenkel, H.A., Blume, A.J., Vitek, M.P. and **Jacobsen, J.S**. 1992. Expression of amyloid precursor protein and its derivative in cultured cells: Lack of sequence specificity in cleavage of APP by secretase. *Society for Neuroscience Abstracts,* vol. 18, p. 19. Anaheim, California, 25-30 October, 1992.

17. Sonnenberg-Reines, J.L., Brown, A.M., George, S., Blume, A.J., **Jacobsen, J.S.** and Barrett, J.E. 1993. Biotinylated and cysteine modified peptides as useful reagents for studying the inhibition of putative N-terminal β-amyloid peptide enzymes. *Society for Neuroscience Abstracts,* vol. 19, p. 861. Washington, D.C., 7-11 November, 1993.

18. **Jacobsen, J.S.,** Spruyt, M.A., Sonnenberg, J.L., Blume, A.J., Brown, A.M. and Muenkel, H.A. 1993. Phorbol-induced cleavage of amyloid precursor protein occurs independently of its phosphorylation and reduces the formation of beta amyloid peptide. *Society for Neuroscience Abstracts,* vol. 19, p. 18. Washington, D.C., 7-11 November, 1993.

19. Sonnenberg-Reines, J.L., Brown, A.M., Tummolo, D.M., Spruyt, M.A. and **Jacobsen, J.S.** 1994. Comparison of a brain-purified metalloprotease with human cathepsin G: Evaluation of sequence specificity using peptide substrates and regional selectivity using purified brain APP. *Society for Neuroscience Abstracts,* vol. 20, p. 1484. Miami, Fl., 13-18 November, 1994.

20. Brown, A.M., **Jacobsen, J.S.,** Spruyt, M.A., Tummolo, D.M. and Sonnenberg-Reines, J.L. 1994. Sequencing of a C-terminal fragment of APP defines the site of cleavage

at the carboxy-terminus of BAP. *Society for Neuroscience Abstracts,* vol. 20, p. 439. Miami, Fl., 13-18 November, 1994.

21. Brown, A.M., Tummolo, D.M., Hoffman, J., **Jacobsen, J.S.** and Sonnenberg-Reines, J.L. 1995. Zinc induces aggregation of PN2 and βAP in Dog, Monkey and Human cerebrospinal fluid. *Society for Neuroscience Abstracts,* vol. 21, p. 1281. San Diego, Ca., 11-16 November, 1995.

22. Tummolo, D.M., Brown, A.M., **Jacobsen, J.S.,** Rhodes, K. and Sonnenberg-Reines, J.L. 1995. βAP levels decrease in the CSF following cholinergic lesioning of the fimbria fornix. *Society for Neuroscience Abstracts,* vol. 21, p. 1480. San Diego, Ca., 11-16 November, 1995.

23. **Jacobsen, J.S.** 1996. Therapeutic Strategies to Reduce Formation of β–amyloid peptide in Alzheimer's Disease. *Therapeutic Opportunities in Alzheimer's Disease: Advances in Diagnostics and Drug Development.* International Business Communications, U.S.A., Oak Brook, Illinois. 17-18 June, 1996.

24. Anderton, B.H., Aplin, A.E., Bayley, P.M., Brion, J.-P., Davis, D.R., Gallo, J.-M., Gibb, G.M., Hanger, D.P., **Jacobsen, J.S.,** Lovestone, S., Reynolds, C.H., Utton, A. and Vandecandelaere, A. 1996. Glycogen synthetase kinase-3 and the phosphorylation of tau and APP. *Research on Age-Related Phenomena, Neurodegeneration and Neuropathology: Abstracts of the Fifth International Conference on Alzheimer's Disease and Related Disorders. Neurobiology of Aging, supplement* 17, number 4S, p. s76. Osaka, Japan, 24-29 July, 1996.

25. Tummolo, D.M., Sun, S.C., Xiang, Q., Zhou, H., **Jacobsen, J.S.,** and Sonnenberg-Reines, J.L. 1996. Quantification of Alzheimer's β-amyloid peptide levels in the plasma, CSF and brain tissue from guinea pig following adminstration of classical protease inhibitors. *Society for Neuroscience Abstracts,* vol. 22, p. 1170. Washington, DC., 16-21 November, 1996.

26. Sun, S.C., Aschmies, S., **Jacobsen, J. S.,** Welmaker, G., Lombardo, L., Moyer, J., and Sonnenberg-Reines, J. 1997. Measurement of Alzheimer's β-amyloid peptide (β-AP) levels in the plasma, CSF and brain tissue from guinea pigs following administration of compounds found inhibitor in the cellular β-AP assay. *Society for Neuroscience Abstracts,* vol. 23, p. 535. New Orleans, Louisiana, 25-30 October, 1997.

27. Krishnamurthy, K., Gong, E., Ellestadt, G., Tasse, R., Fairman, D., Lu, P., Boast, C., and **Jacobsen, J.S.** Characterization of Fibrillogenesis of Amyloid Peptide. 215th National Meeting and Exposition for the American Chemical Society Annual Meeting, p. 101, Dallas, Texas, March 29-April 2, 1998.

28. Tezapsidis, N., Johnsingh, A., Li., H.-C., Efthimiopoulos, S., Elder, G. A., **Jacobsen,**

J. S., Wang, R., Kreis, T. E., Robakis, N. K. 1998. Presenilin-1 is associated with CLIP-170, a microtubule-Interacting Protein. *Research on Age-Related Phenomena, Neurodegeneration and Neuropathology: Abstracts of the Sixth International Conference on Alzheimer's Disease and Related Disorders. Neurobiology of Aging,* Volume 19, number 4S, p. s301. Amsterdam, 18-23 July, 1998.

29. Tezapsidis, N., Johnsingh, A., Li., H.-C., Efthimiopoulos, S., **Jacobsen, J. S.,** Kreis, T. E., Robakis, N. K. 1998. Presenilin-1 is associated with CLIP-170, a microtubule-Interacting Protein. *Society for Neuroscience Abstracts.* vol. 24, p. 758. Los Angeles, California, 7-12 November, 1998.

30. Johnsingh, A., Kotula, L., Efthimiopoulos, S., **Jacobsen, J. S.,** Kreis, T. E., Robakis, N. K., Tezapsidis, N. 1998. Presenilin-1 is co-localized with CLIP-170, and their interaction mediates Aβ production. *Society for Neuroscience Abstracts.* vol. 24, p. 468. Los Angeles, California, 7-12 November, 1998.

31. **Jacobsen, J. S.,** Tezapsidis, N., Johnsingh, A., Kotula, L., and Kreis, T. E. 1999. Presenilin-1 mediates Aβ production through its binding to a microtubule-associated protein. *Keystone Symposia on Molecular and Cellular Biology: Molecular Mechanisms in Alzheimer's Disease. Abstract Supplement,* p. 42, Taos, New Mexico, 3-8 March, 1999.

32. Ozenberger, B. A., Kajkowski, E., Lo, F., Walker, S., Sofia, H., Rhodes, K., Bard, J., and **Jacobsen, J. S.,** 1999. A novel protein containing a potential G protein coupling module affects cellular sensitivitiy to β-amyloid peptide. *Keystone Symposia on Molecular and Cellular Biology: Molecular Mechanisms in Alzheimer's Disease. Abstract Supplement,* p. 54, Taos, New Mexico, 3-8 March, 1999.

33. Kajkowski, E., Lo, F., Smith, S., Walker, S., Wood, A., Sofia, H., Bard, J., **Jacobsen, J. S.** and Ozenberger, B. A. 1999. A novel family of apoptosis modulators containing G protein coupling motif. *Annual Meeting of the American Society for Biochemistry and Molecular Biology. Abstract Supplement,* San Francisco, CA, 16-20 May, 1999.

34. Lo, C. F., Kajkowski, E. M., Walker, S., Smith, S. C., Wood, A., Finley, J., Rhodes., K., Bard, J., **Jacobsen, J. S.,** and Ozenberger, B. A. 1999. The Aβ binding protein βBP1 is a member of a family of structurally novel apoptosis modulators. *Society for Neuroscience Abstracts.* vol. 29, p. 206. Miami, FL., 23-28 October, 1999.

35. Ozenberger, B. A., Lo, C. F., Kajkowski, E. M., Walker, S., Smith, S. C., Wood, A., Bard, J., and **Jacobsen, J. S.** 1999. βBP1 mediates cellular vulnerability to Aβ by a G protein and caspase-dependent mechanism. *Society for Neuroscience Abstracts.* vol. 29, p. 291. Miami, FL., 23-28 October, 1999.

36. Tezapsidis, N., Johnston, J. M., Merz, G. S., **Jacobsen, J. S., Xu, J.,** Kotula, L.,

Sapienza, V. J., and Johnsingh, A. A. 2000. Presenilin's action on Amyloid Precursor Protein cleavage is mediated through cytoplasmic linker protein 170. *World Alzheimer's Congress 2000: Pivotal Research. Abstract Supplement,* #818, p. 82, Washington, D.C., 9-13 July, 2000.

37. Wang, W., Kajkowski, E., Lo., F.L.,**Jacobsen, J.S.,** and Ozenberger, B. 2000. Aβ Binding Protein BBP1 and Structurally Related Proteins Can Physically Associate with APP. *Society for Neuroscience Abstracts.* vol. 30, p. 436. New Orleans, LA, 4-9 November, 2000.

38. Ning, X., Kajkowski, E., Ryan, K., Edris, W., Chandra, P., Vile, S., Walker, S., Bard, J., **Jacobsen, J.S.,** Kennedy, J. and Ozenberger, B. 2000. Aβ Binding Protein BBP1 shows selective and high affinity association with Aβ binding peptide *in vitro. Society for Neuroscience Abstracts.* vol. 30, p. 436. New Orleans, LA, 4-9 November, 2000.

39. Walker, S.G., Ryan, K., Vile, S., Ning, X., Edris, W., Chandra, P., **Jacobsen, J.S.,** Kennedy, J., Ozenberger, B. and Bard, J. 2000. Beta-Amyloid Binding Protein BBP1 Specifically binds Aβ 1-40 *in vitro. Society for Neuroscience Abstracts.* vol. 30, p. 436. New Orleans, LA, 4-9 November, 2000.

40. Ozenberger, B., Lo., F.L., Wang, W., Kajkowski, E., Walker, S., Bard, J., Smith, S.C., Wood, A., Rinde, B., Kennedy, J., and **Jacobsen, J.S.** 2000. Aβ-Induced Apoptosis in Cultured Neurons is Regulated by the BBP1 Protein. *Society for Neuroscience Abstracts.* vol. 30, p. 155. New Orleans, LA, 4-9 November, 2000.

41. Zhang, M.-Y., Kerns, E., Sonnenberg-Reines, J., Ashmies, S., **Jacobsen, J.S.,** Cai. Y., McConnell, O. Brain and plasma exposure profile in drug discovery by cassette administration. *49th American Society for Mass Spectrometry Conference, Chicago, IL, May 87-31, 2001.*

42. Zhang, M.-Y., Kerns, E., Cai, Y., McConnell. O., Sonnenberg-Reines, J., Zaleska, M., Aschmies, S., Bramlett, D., **Jacobsen, J.S.,** Butera, J., and Kreft, A. 2001. Brain and Plasma Exposure Profile in Drug Discovery by Cassette Administration and Liquid Chromatography/Tandem Mass Spectrometry. *49th Conference on Mass Spectrometry and Allied Topics,* Chicago, IL, 28-31 May, 2001.

43. Martone, R., Atchison, K., Gong, X., Kreft, A., Diamantidis, G., Aschimes, S., Sonnenberg-Reines, J., Sun, R., and **Jacobsen, J.S.** A method for the *in vivo* assessment of APP gamma-secretase inhibitors using quantitative extraction and measurement of APP-derived Ct-99 fragment. *Strategic Research Institute,* Princeton, NJ, 25-27 July, 2001.

44. Jin, M., Turner, J., Chiriac, C., **Jacobsen, J.S.**, Kirsch, D.R., Bard, J., and Silverman, S.J. 2001. γ-Secretase Gene Hunt: A Generalizable Activator-release Screen for Proteases and Protease Inhibitors. *Society for Neuroscience Abstracts.* vol. 31, p. 98. San Diego, CA, 10-15 November, 2001.

45. Comery, T.A., Sonnenberg-Reines, J., Kreft, A.F., Diamantidis, G., **Jacobsen, J.S.**, and Marquis, K.L. Reversal of hippocampal cognitive impairment in the Tg2576 mouse model of Alzheimer's Disease. *6th International Conference on Alzheimer's and Parkinson's Disease,* Seville, Spain, May 8-12, 2002.

46. Ning, X., Jin, M., Kajkowski, E., Lo, C.F., Gonzales, C., Zaleska, M.M., Franco, R., **Jacobsen, J.S.**, Silverman, S., and Ozenberger, B.A. Caspase Recruitment Doman Gene Expression Analysis in Model Systems of Neurodegeneration. Program No. 198.3. *2002 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, Orlando, FL. 2-7 November, 2002. Online.

47. Stein, A.P., Hu, Y., Bard, J., Gong, X., **Jacobsen, J.S.**, and Boast, C.A. Rat Brain Expression of Mutated hAPP and Processing to Aβ After Gene Transduction with Adenovirus Vector. Program No. 296.11. *2002 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, Orlando, FL. 2-7 November, 2002. Online.

48. Shen, R., Kotnis, S., Ma, L., Sreekumar, K., Lo, C.F., Naureckiene, S., Jenkins, L.P., Ozenberger, B.A., **Jacobsen, J.S.**, Kennedy, J.D., Wood, A., and Bingham, B. Mutational analysis of NARC1, a novel target in neuronal apoptosis, using laser scanning cytometry. *Experimental Biology (ASPET),* San Diego, CA, 11-15 April, 2003.

49. Mayer, S.C., Aschmies. S., Atchison, K., Chlenov, M., Comery, T.A., Gallaway, W., Gong, G., Hoke, M. E., **Jacobsen, J.S.**, Jain,U., Kreft, A.F., Lu, P., Martone, R., Oganesian, A., Sangari, R., Sonnenerg-Reines, J., Sun, R. and Zhou, H. The Design and Synthesis of WAY-210953 – A "Notch-Separable" γ-Secretase Inhibitor Pre-Development Lead for the Treatment of Alzheimer's Disease (Wyeth Retreat, 7 May, 2003, Princeton, N.J.).

50. Naureckiene, S., Ma, L., Sreekumar, K., Lo, C.F., Huang, Y., Ozenberger, B.A., **Jacobsen J.S.**, Kennedy, J.D., Wood, A. and Bingham, B. Characterization of NARC 1, A Novel Gene in Neuronal Apoptosis *6th IBRO World Congress of Neuroscience, Prague, Czech Republic, July 10-15, 2003.*

51. Ma, L., Kotnis, S., Shen, R., Naureckiene, S., Lo, C.F., Jenkins, L.P., Sreekumar, K., Huang, Y., Ozenberger, B.A., **Jacobsen, J.S.**, Kennedy, J.D., Wood, A., Bingham, B. Functional Characterization of NARC 1, A Novel Gene in Neuronal Apoptosis. *19th International Congress of Biochemistry and Molecular Biology, Toronto, Canada, July 20-24, 2003.*

52. Ma. L., Kotnis, S., Shen, R., Naureckiene, S., Lo, C.F., Jenkins, L.P., Sreekumar, K., Huang, Y., Ozenberger, B.A., **Jacobsen, J.S.**, Kennedy, J.D., Wood, A., Bingham, B. Functional Characterization of NARC 1, A Novel Gene in Neuronal Apoptosis. *6th World Congress on Inflammation, Vancouver, Canada, August 2-6, 2003.*

53. Comery, T., Aschmies, A., Atchison, K.P., Borusovic, K., Diamantidis, G., Gong, X., Mayer, S.C., Zhou, H., Martone, R.L., Sonnenberg-Reines, J., Kreft, A.F., **Jacobsen, J.S.,** and Marquis, L.K. Acute gamma-Secretase Inhibition Improves Cognition in the Tg2576 Mouse Model of Alzheimer's Disease. *2003 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, New Orleans, LA. 8-12 November, 2003.

54. Liu, F., Ning, X., Jin, M., Lo, C.F., Kajkowski, E., Chiriac, C., Naureckiene, S., Lock, T., Pong, K., Gonzales, C., Zaleska, M.M., **Jacobsen, J.S.,** Silverman, S., Ozenberger, B.A. Death domain protein NALP1 binds dATP and regulates neuronal apoptosis. *2003 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, New Orleans, LA. 8-12 November, 2003. Online.

55. Wagner, E., Comery, T., Turner, J., Hu, Y., Aschmies, S., Oganesian, A., Gonzales, C., Erdei, J., Gunawan, I., Fobare, W., Solvibile, W., Quagliato, D., Andre, P. Zhou, P., Yan, Y., Barnes, K., Johnson, M., Klos, A., Hui, Y., Cowling, R., Jin, G., Lin, L., Strand, J., Di, L., Chlenov, M., Kraml, C., Jain, U., Polakowski, S., Huselton, C., Fan, K., Chopra, R., **Jacobsen, S.,** Robichaud, A., Magolda, R., Pangalos, M., Malamas, M., and Bard, J. A Small Molecule BACE1 Inhibitor Lowers Brain Abeta Levels And Reverses Cognitive Deficits in a Transgenic Mouse Model of Alzheimer's Disease. (Wyeth Retreat, 3 May, 2004, Princeton, N.J.).

56. Comery, T.A., Marquis, K.L., Seubert, P, Zaleska, M.M., **Jacobsen,** J.S. Acute passive immunization against β-amyloid improves cognition in a transgenic mouse overexpressing hAPP. 9th International Conference of Alzheimer's Disease and Related Disorders, Philadelphia, PA, 17-22 July 2004.

57. Comery, T.A., Marquis, K.L., Pangalos, M.N., **Jacobsen, J.S.,** and Zaleska, M.M. Hippocampal cognitive dysfunction in the Tg2576 mouse model of Alzheimer's Disease. *2004 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, San Diego, CA. 23-27 October, 2004. Online.

58. Pangalos, M.N., Reinhart, P. and **Jacobsen, J.S.** Disease modifying therapies for the treatment of Alzheimer's disease targeted at modulating levels of the amyloid β-peptide. Molecular Mechanisms of Neurodegeneration: a Joint Biochemical Society/Neuroscience Ireland Focused Meeting. Biochemical Society. Dublin, Ireland. 14-16 March, 2005.

59. Kubek, K., Atchison, K., Pong, K., Graziani, E., **Jacobsen, J.S.,** Reinhart, P.H., Pangalos, M.N., and Martone, R. Rotenone-induced aggregation of α-synuclein is reversed by rapamycin. International Society for Neurochemistry, European Society for Neurochemistry Meeting, Innsbruck, Austria, 21 August, 2005.

60. Fan, K.Y., Huang, X., Aulabaugh, A., Gundersen, E., Haas, K., Harrison, B., **Jacobsen, J.S.,** Katz, A.H., Kreft, A., Martone, R., Mayer, S., Porte, A. Pharmacophore Hypothesis for γ-Secretase Inhibitor and Application in Virtual Screening. 230th American Chemical Society (ACS) National Meeting and Exposition, Washington, DC, 28 August-1 September, 2005.

61. Pangalos, MP., **Jacobsen, J.S.**, Comery, T.A., Wu, C.-C., Redwine, J.M., Arias, R. Martone, R., Aschmies, S., Atchinson, K.P., Morrison, J.H., Marquis, K., Bloom, F.E., Reinhart, P.H. Early-onset Behavioral and Synaptic Deficits in a Mouse Model of Alzheimer's Disease Are Reversed by Inhibition of Gamma Secretase. 2005 ACNP.

62. Lo, C.F., Ning, X., Gonzales, C., Liu, F., Kajkowski, E.M., Zaleska, M.M., Wood, **Jacobsen, J.S.**, and Ozenberger, B.A. Induced expression of a pro-apoptotic gene NALP5 following neuronal injuries. 2005 ASCB.

63. Comery, T.A., Marquis, K.L., Barbour, R, Johnson-Wood, K., Seubert, P., Schenk, D., Pangalos, M.N., Reinhart, P.H. and **Jacobsen, J.S.** Passive immunization against β-amyloid leads to acute cognition improvement. (Submitted for Society for Neuroscience, Washington, DC, 12-16 November, 2005).

64. **Jacobsen, J.S.,** Comery, T.C., Martone, R., Aschmies, S., Oganesian, A., Zhou, H., Atchison, K., Elokdah, H., Crandall, D., Zaleska, M.M., Reinhart, P.H. and Pangalos, M.N. Small molecule inhibitors of PAI-1 activate the tPA/plasminogen cascade and enhance proteolytic clearance of Aβ as a novel therapeutic strategy for the treatment of Alzheimer's Disease. (Submitted for Society for Neuroscience, Washington, DC, 12-16 November, 2005).

65. Bard, J., Turner, J., Hu, Y., Wagner, E., Aschmies, S., **Jacobsen, J.S.,** Reinhart., P.H., Pangalos, M.N., Cowling, R., Jin, G., Lin, L., Strand, J., Stahl., M., Kriz, R., Chopra, R., Fan, K., Somers, W., Ellingboe, J., Sukhdeo, M., Jennings, L., Stock, J., Lovering, F., Condon, J., Solvibile, W., Fobare, W., Zhou, P., Manas, E., Cole, D. and Malamas, M. Identification and characterization of small molecule BACE1 inhibitors. (Submitted for Society for Neuroscience, Washington, DC, 12-16 November, 2005).

66. Ma, L., Kennedy, J.D., Lu, P., Piesla, M., **Jacobsen, J.S.,** Rogers, K., Riddell, D. *In vitro* and *in vivo* anti-inflammatory activity of LxR agonists. (Submitted for Society for Neuroscience, Washington, DC, 12-16 November, 2005).

67. Zhou, H., Kirksey, Y., Atchison, K., Aschmies, S., Comery, T.A., Kouranova, E., Ring, R.H., Oganesian, A., Martone, R., Pangalos, M.N., Reinhart, P.H., **Jacobsen, J.S.** and Riddell, D.R. Liver X Receptor activation does not inhibit amyloid precursor processing in young APP transgenic mice. (Submitted for Society for Neuroscience, Washington, DC, 12-16 November, 2005).

68. Lo, C.F., Ning, X., Gonzales, C., Liu, F., Kajkowski, E.M., Zaleska, M.M., Wood, **Jacobsen, J.S.**, and Ozenberger, B.A. Induced expression of a pro-apoptotic gene NALP5 following neuronal injuries. 2005 ASCB.